

# MICRO COMPONENT DVD AUDIO SYSTEM DVD/CD-R/RW/MP3-CD PLAYBACK MM-DB9

# **Instruction Manual**

#### Safety Warnings



CLASS 1 LASER PRODUCT KLASSE 1 LASER PRODUKT LUOKAN 1 LASER LAITE KLASS 1 LASER APPARAT PRODUCTO LASER CLASE 1



TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE REAR COVER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

#### **CLASS 1 LASER PRODUCT**

This Compact Disc player is classified as a CLASS 1 LASER product.

Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

#### CAUTION-INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED, AVOID EXPO-SURE TO BEAM.



This symbol indicates that dangerous voltage which can cause electric shock is present inside this unit.



This symbol alerts you to important operating and maintenance instructions accompanying the unit.

WARNING: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT. FULLY INSERT.

#### Wiring the Main Power Supply Plug(UK Only)

#### IMPORTANT NOTICE

The main lead on this equipment is supplied with a moulded plug incorporating a fuse. The value of the fuse is indicated on the pin face of the plug and if it requires replacing, a fuse approved to BS1362 of the same rating must be used.

Never use the plug with the fuse cover removed. If the cover is detachable and a replacement is required, it must be of the same colour as the fuse fitted in the plug. Replacement covers are available from your dealer.

If the fitted plug is not suitable for the power points in your house or the cable is not long enough to reach a power point, you should obtain a suitable safety approved extension lead or consult your dealer for assistance.

However, if there is no alternative to cutting off the plug, remove the fuse and then safely dispose of the plug. Do not connect the plug to a main socket as there is a risk of shock hazard from the bared flexible cord.

Never attempt to insert bare wires directly into a main socket. A plug and fuse must be used at all times.

#### **IMPORTANT**

The wires in the main lead are coloured in accordance with the following code:-

BLUE = NEUTRAL BROWN = LIVE

As these colours may not correspond to the coloured markings identifying the terminals in your plug, proceed as fol-

The wire coloured BLUE must be connected to the terminal marked with the letter N or coloured BLUE or BLACK. The wire coloured BROWN must be connected to the terminal marked with the letter L or coloured BROWN or RED.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E OR BY THE EARTH SYMBOL  $\longrightarrow$  , OR COLOURED GREEN OR GREEN AND YELLOW.

# Contents

Thank you for buying this SAMSUNG micro component system.

Please take time to read these instructions. They will allow you to operate your system with ease and take full advantage of its features.



♦ SAFETY WARNINGS	. ◆ Tuner	
♦ INSTALLING YOUR MICRO COMPONENT SYSTEM	■ Searching for and Storing the Radio Stations	23
■Front Panel View4	■Selecting a Stored Station	23
■Rear Panel View5	■Improving Radio Reception	23
■Remote Control6	■ About RDS broadcasting	24
■Where to Install Your Micro Component System8	■ About RDS DISPLAY function	24
■Connecting your System to the Power Supply8	■ PTY (Program Type) indication and PTY-SEARCH function	tion25
■Connecting to an External Source8	◆Tape Deck	
■CD Digital Out Jack8	■Listening to a Cassette	26
■Speaker Connection9	■Tape Counter	26
■Connecting the AM (MW)/LW Aerial10	■ Selecting the Cassette Playback Mode	26
■Connecting the FM Aerial10	■ Recording a Compact Disc	27
■Connection of the TV monitor11	■ Recording a Radio Program	27
■Connection for better sound12	◆ OTHER FUNCTIONS	
■7-Color Display Function13		28
■Demo Function13	■ Cancelling the Timer	28
■ Setting the Clock13	■Mute Function	29
◆ DVD/CD-PLAYER	■ Selecting an Equalizer Preset	29
■ Playing a Disc14	■S. Bass Function	29
■ DVD Playback14	■ Power Surround	29
■ Forward/Reverse Searching15	■ Setting the System to Switch off Automatically	30
■ Slow Playback/Checking the Remaining Time16	■Connecting Headphones	30
■ Repeat Playback16	◆ Recommendations for Use	
■ Using Disc Menu/Title17	■ Safety Precautions	31
■ Program Playback17	■ Cleaning Your Micro Component System	31
■ Selecting the Audio Language/Subtitle Language18	■ Precautions When Using Compact Discs	32
■ Various DVD Functions19	■ Precautions When Using Audio Cassettes	32
■ MP3 Playback20	■ Before Contacting the After-Sales Service	32
■ System Setup21	■ Technical Specifications	33
■ Setting up the Language Features22	■Reference	34

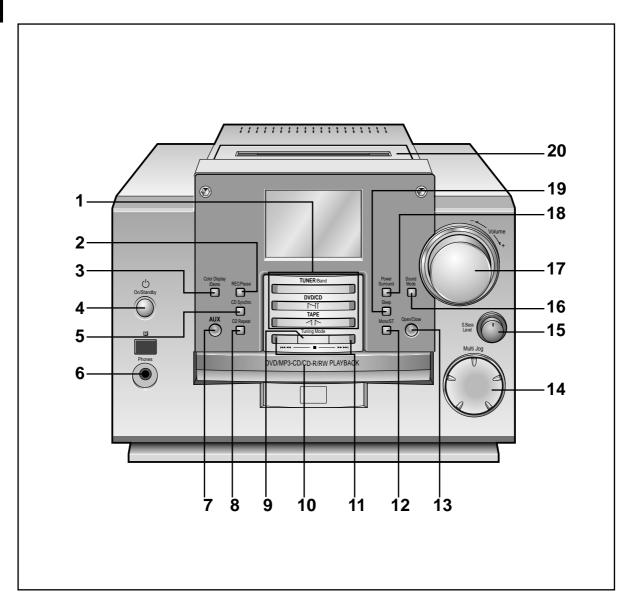










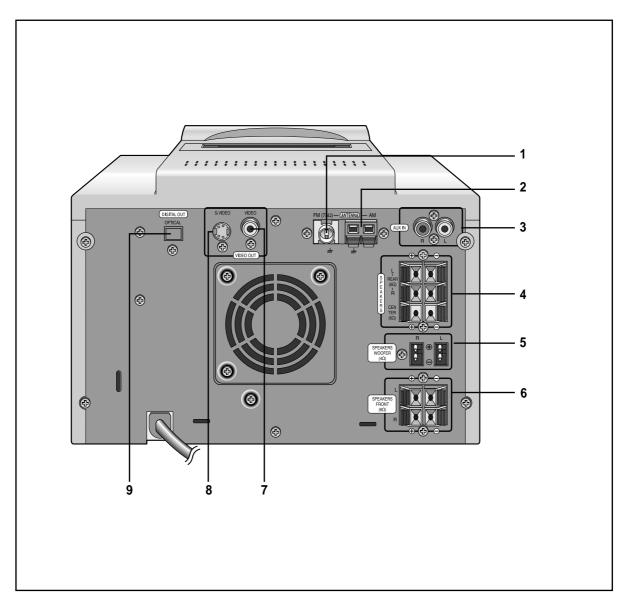


- 1. Function (TUNER, DVD/CD,TAPE)
- 2. REC/Pause
- 3. Color Display/Demo
- 4. On/Standby
- 5. CD Synchro
- 6. Headphone Jack Connector
- 7. AUX
- 8. CD Repeat
- 9. Stop
- 10. Disc Tray

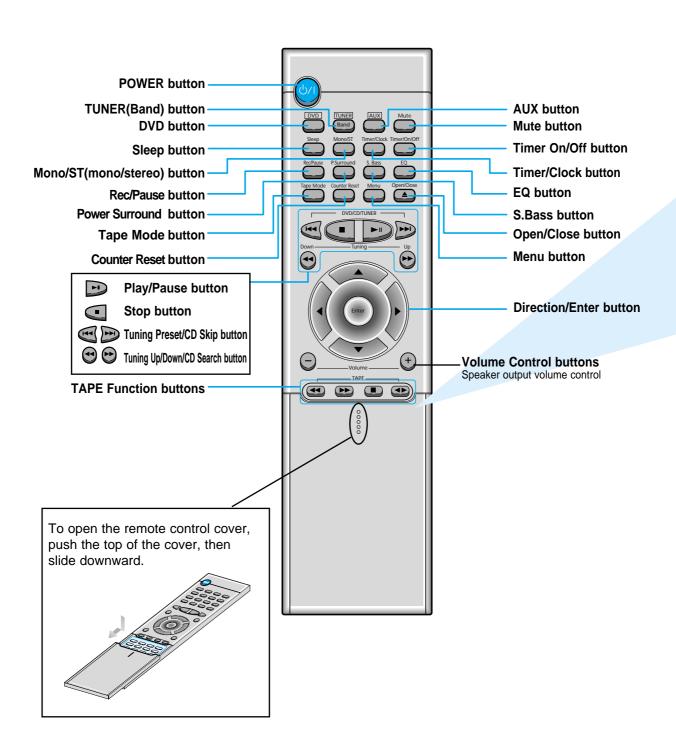
- 11. Skip or Search
- 12. Mono/ST
- 13. CD Door open/close
- 14. Multi Jog
- 15. S.Bass Level
- 16. Sound Mode
- 17. Volume
- 18. Power Surround
- 19. Sleep
- 20. Push Eject (Cassette Door Open/Close)

# Rear Panel View

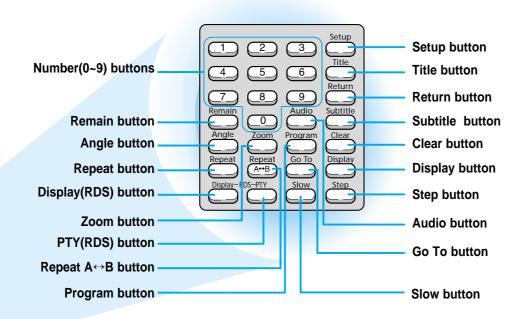




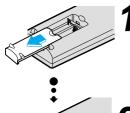
- 1. FM Aerial Connector Terminal
- 2. AM Aerial Connector Terminal
- 3. AUX-Input
- 4. REAR Speaker / CENTER Speaker
- 5. SUBWOOFER Speaker
- 6. FRONT Speaker
- 7. VIDEO OUT
- 8. S-VIDEO OUT
- 9. CD Digital Out jack



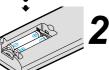




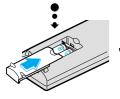
#### **Insert Remote Batteries**



Remove the battery cover on the back of the remote by pressing down and sliding the cover in the direction of the arrow.



Insert two 1.5V AAA batteries, paying attention to the correct polarities (+ and –).



Replace the battery cover.



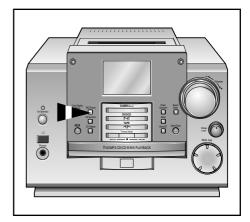
#### Follow these precautions to avoid leaking or cracking cells:

- Place batteries in the remote control so they match the polarity:(+) to (+)and (-)to (-).
- Use the correct type of batteries.Batteries that look similar may differ in voltage.
- Always replace both batteries at the same time.
- Do not expose batteries to heat or flame.

#### Video Output Selection

- Press the REC/Pause button in POWER OFF, then it is converted to
  - " NTSC → PAL ] " and select the TYPE you want.

    Example: Select PAL, if TV is for PAL.
- When disk is set to NTSC in PAL, it doesn't operate.

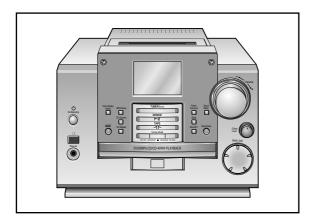


#### Where to Install Your Micro Component System



To take full advantage of your new micro component system, follow these installation instructions before connecting the unit.

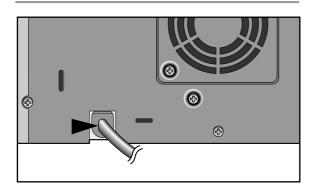
- ♦ Install the system on a flat, stable surface.
- Never place this unit on carpeting.
- Never place this unit in an outdoor area
- Maintain an open space of approximately 6 inches (15 cm) on the sides and rear of the system, for ventilation purposes.
- Make sure that you have enough room to open the compact disc compartment easily.
- Place the loudspeakers at a reasonable distance on either side of the system to ensure good stereo sound.
- Direct the loudspeakers towards the listening area.
- For optimum performance, make sure that both speakers are placed at an equal distance above the floor.



# Connecting your System to the Power Supply

The main lead must be plugged into an appropriate socket.

- Before plugging your system into a main socket, you must check the voltage.
- 1 Plug the main lead (marked AC Cord on the rear of the system) into an appropriate socket.
- 2 Press the **On/Standby(**(**b**) button to switch your micro component system on.



#### Connecting to an External Source

The auxiliary input can be used to take advantage of the sound quality of your micro component system when listening to other sources.

Examples: ♦ A television

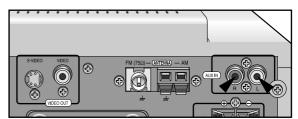
- A video disc player
- ♦ A Hi-Fi stereo video cassette recorder
- To connect the external source, the source must have an audio output. In addition, you need an RCA connection cable.
- Set the system to standby mode and disconnect it and the external source from the main.
- 2 Connect the audio cable to the rear of the micro component system.

Connect the	To the connector marked
Red jack	R (right)
White jack	L (left)

- > For optimum sound quality, do not invert the right and left channels.
- 3 Plug the system back into the main socket and press On/Standby (b) to switch it on.
- 4 Select the AUX source by pressing AUX. Result: AUX is displayed.
- Switch the external source on.
- 6 Adjust the volume and balance as required:

  ♦ Volume ♦ Equalizer ♦ S.Bass

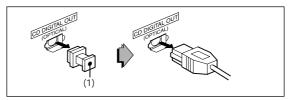
Example: You can watch a film and take advantage of stereo sound provided that the original sound track is in stereo (as if you were in a cinema).



#### CD Digital Out Jack

This unit can output CD digital sound signals through this jack. Use an optical cable to connect digital audio equipment. (DAT deck. MD recorder, etc.).

(DAT deck, MD recorder, etc.).
Remove the dust cap (1) from the CD DIGITAL OUT jack. Then, connect an optical cable plug to the CD DIGITAL OUT jack.



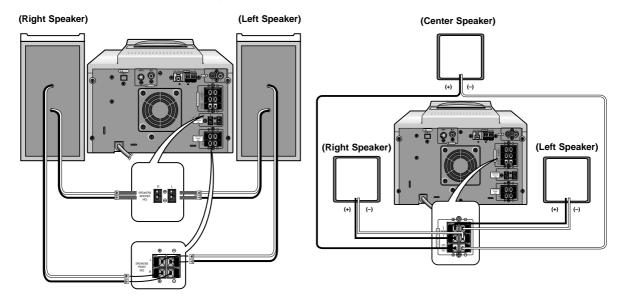
When the CD DIGITAL OUT jack is not being used. Attach the supplied dust cap.

#### Speaker Connection



The System has Main Speaker jacks and Subwoofer Speaker jacks.

- Front Speaker Connection: Connect the Front Speaker cords (red/black) to the Main Speaker jacks of the System.
- Subwoofer Speaker Connection: Connect the Subwoofer Speaker cords (blue/black) to the Subwoofer Speaker jacks of the System.
- Center Speaker Connection: Connect the center speaker cord to the CENTER SPEAKER terminal.
- Rear Speaker Connection: There is no difference between the Rear speakers.
   Both speakers can be connected as R (right) or L (left).
   Connect the Rear speaker cords to the REAR SPEAKERS terminals.



## **Speaker Setting Methods**

To ensure the finest performance from your Dolby Digital system, it is important to position the speakers correctly.

#### Front Speakers ) • • •

Set the front speakers so that their tweeters (high-range) are aligned at about ear level and at a horizontal angle of 45° to the prime listening position.

#### Rear Speakers ) • • •

Set the rear speakers further back, parallel to the walls, at 60 to 90 centimeters (2 to 3 feet) above prime listening position ear level.

If the space behind the listening position is insufficient (i.e., too close to the wall), place the rear speakers facing each other on either side.

#### Center Speaker ) • • •

Ideally the center speaker should be positioned with its top surface flush with the front speakers. However, you may place the speaker either on top or near the bottom of your TV set.

#### Directions in Installing Speaker

- Installation in a place near heating apparatus, under direct lay of light or with high humidity may cause performance degradation of the speaker.
- Do not install on the wall or on a high place of pole or other unstable place to prevent any safety accident caused by falling of the speaker.
- Do not take the speaker apart from TV or computer monitor. The speaker near the TV or computer monitor may influence the quality of the screen display.
- When playing back a 5.1 channel encoded DVD, sound is output from the center and rear speakers only.
  - When playing back a 2 channel encoded DVD, CD, tape, or tuner, no sound is output from the center and rear speakers.

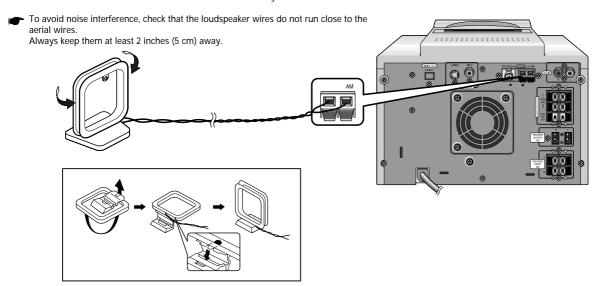
# Connecting the AM (MW)/LW Aerial



The AM aerial (for long and medium waves) can be:

- ♦ Placed on a stable surface
- ♦ Fixed to the wall (you must first remove the base)

The AM aerial connector terminals are located on the rear of the system and are marked AM .

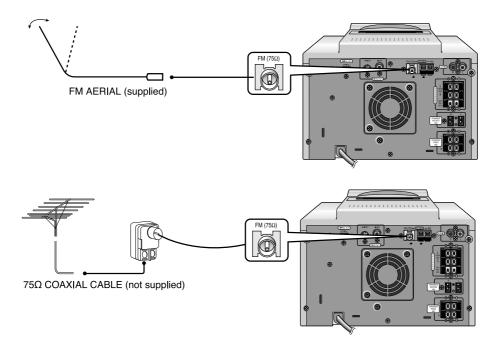


# Connecting the FM Aerial

How to connect a COAXIAL TYPE aerial.

- $\bullet$  Connect a 75 $\Omega$  antenna to the **FM** antenna terminal.
- Plug the connector on the **FM** aerial supplied into the coaxial socket (75Ω) marked **FM** on the rear of the system.
- Follow the instructions given on Page 23 to tune into a radio station, and determine the best position for the aerial.
- ♦ If reception is poor, you may need to install an outdoor aerial.

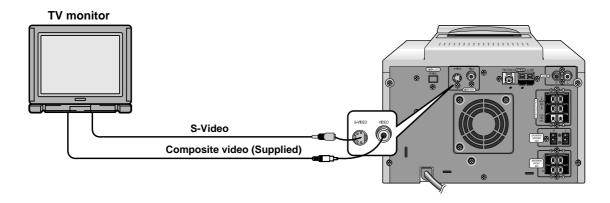
To do so, connect an outdoor FM aerial to the FM socket on the rear of the system using a 75Ω coaxial cable (not supplied).



# Connection of the TV monitor



The following show examples of connections commonly used to connect the DVD player with a External Source. (Example : TV, VCR, DAT CD-RW, etc)



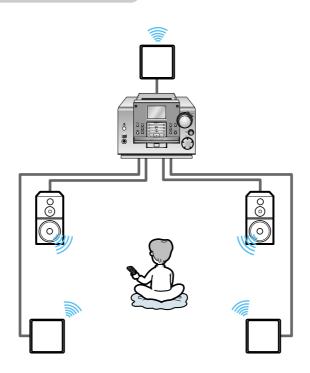
> • When S-VIDEO is connected, S-VIDEO has priority.

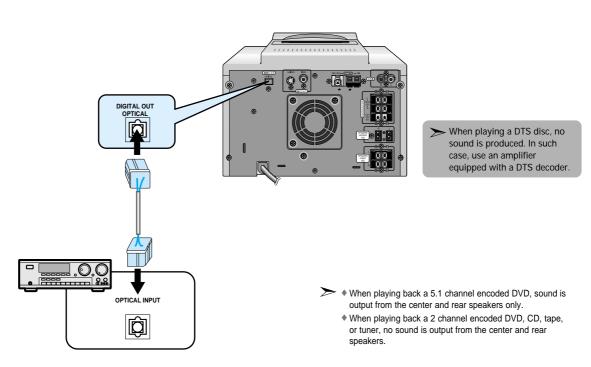
# Connection for better sound



Connecting to an amplifier with Dolby Pro Logic support.

What is Dolby Pro Logic?
Using five speakers, it recreates the original sound of the music or audio and provides the sense of presence, as if you were in a movie theater or concert hall.



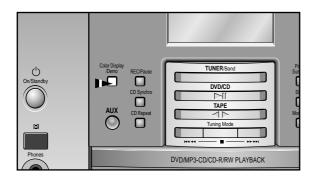


# 7-Color Display Function

The System allows you to choose your favorite color to produce your own personal atmosphere.

- 1 Switch the system on by pressing **On/Standby** ( () / |).
- 2 Press the **Color Display/Demo** button and select the color you want.

  Result: Whenever the button is pressed, the color is repeated in the sequence of Cyan → Green → Red → Blue → Violet → Y. Green → White → Off → Auto.
- 3 If you select Auto mode, 7 colors are displayed for 3 seconds alternatively.

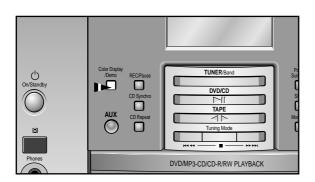


#### **Demo Function**

You can view the various functions available on your system.

- Switch the system off by pressing On/Standby ( ) 1).
- Press the Color Display/Demo button.

  Result: The various functions available are listed in turn on the display
- All these functions are described in detail in this booklet. For instructions on how to use them, refer to the appropriate
- 3 To cancel this function, press **Color Display/Demo** again.



## Setting the Clock

Your system is equipped with a clock which allows you to turn your system on and off automatically. You should set the clock:

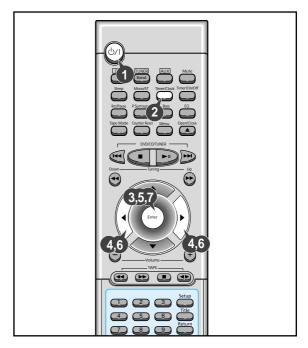
- When you first purchase the micro component system
- After a power failure
- ♦ After unplugging the unit
- For each step, you have a few seconds to set the required options. If you exceed this time, you must start again.
- 1 Switch the system on by pressing On/Standby ( ) 1).
- 2 Press **Timer/Clock** twice. Result: **CLOCK** is displayed.
- 3 Press Enter.
  Result: The hour flashes.

4	То	Press
	Increase the hours ·····	<b>&gt;</b>
	Decrease the hours	◀

When the correct hour is displayed, press **Enter**. Result: The minutes flash.

6	То	Press	
	Increase the minutes	<b>&gt;</b>	
	Decrease the minutes	<b>◄</b>	

- When the correct time is displayed, press Enter. Result: The clock starts and is displayed, even when the system is in standby mode.
- You can display the time, even when you are using another function, by pressing Timer/Clock once.
  - ♦ You can use the Multi Jog to instead ◀ / ▶ button in step 4.6.





## Playing a Disc



#### Playback

- 1 Press the Open/Close(▲) button.
- 2 Place a disc gently into the tray with the disc's label facing up.
- 3 Press the Play/Pause(►II) button or Open/Close(▲) button to close the disc tray.
- When playing back MP3-CD's, song titles are not displayed on the main unit, but on the TV screen.

#### Pausing Playback

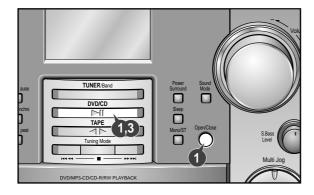
Press the Play/Pause ( ) button during playback.

- ♦ To resume, press the Play/Pause (▶Ⅱ) button again.
- Depending on the disc, the initial disc information screen may look disc to disc.
  - When playing a DVD containing MPEG format, video may not be reproduced correctly and you may get picture distortion.

#### Stopping Playback

Press the Stop ( ■ ) button during playback.

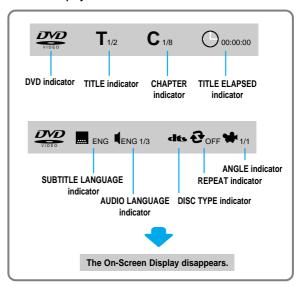
- ◆ During playback, when the Stop (■)button is pressed, the position is stored in the memory, and ►■ STOP is shown on the display. When the Play/Pause (►■) button or Return button is pressed subsequently playback resumes from the position at which it was stopped.
- If the Stop ( ■) button is pressed a second time, the resume play memory function is canceled, and STOP is shown on the display. When the Play/Pause (▶■) button is pressed, playback starts from the beginning.

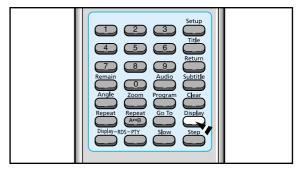


#### **DVD** Playback

Using the On-Screen Display

Press the **Display** button on the remote.





What is a Title?

♦ A movie contained in a DVD disc.

What is a Chapter?

Each Title on a DVD disc is divided into several smaller sections called "chapters".

#### Turning the sound off temporarily?

Press the Mute button during playback.

- This operation may be useful when you need to greet the guests or answer the telephone.
- If the player is left for more than 3 minutes in pause mode, it will stop.

# Forward/Reverse Searching

During playback, you can search quickly through a chapter or track for a specific scene or tune.



Press the ◀◀ and ▶▶ button.

Each time the dutton is pressed

Each time the button is pressed

X 2

X 4

X 4

X 8

PLAY

Each time the button is pressed

Fig. 32

Fig.

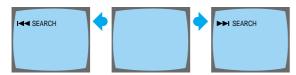
♦ **♦** playback (reverse playback) is possible on DVDs.

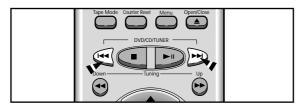


#### Skipping through a Chapter

Press the I◀◀ and ▶▶I button.

- Each time the button is pressed during playback, it moves to the next or previous chapter and plays it.
- However, you cannot skip forward or backward through consecutive the chapters.





#### Playing Frame by Frame

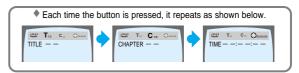
Press the Step button.

- ♦ The picture moves forward one frame each time the button is pressed.
- No sound is heard during high-speed playback and step motion.

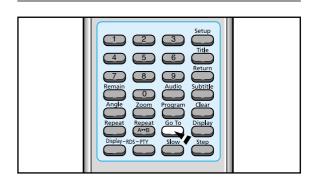




- To move directly to a title, chapter, or time
- 1 Press the Go To button.



- Press Number(0~9) button or the Left/Right ( ◀/▶) button.
  - ♦ Each The desired scene is located and then played.
  - ◆ Depending on the disc, the Title function may not work.



#### Slow Playback/Checking the Remaining Time

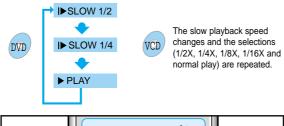


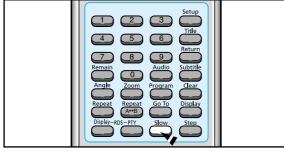


Playing Slowly

Press the Slow button.

Each time the Slow button is pressed





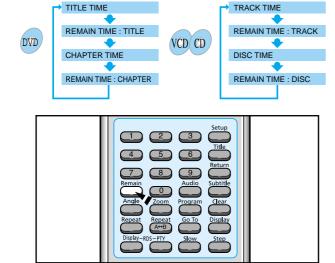


Checking the Remaining Time

#### Press the Remain button.

♦ For checking check the total time and the remaining time of a title or chapter being played.

Each time the Remain button is pressed



## Repeat Playback

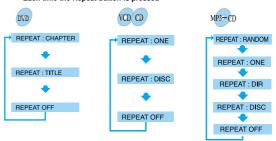
Repeat playback allows you to repeat a chapter, title, or track.

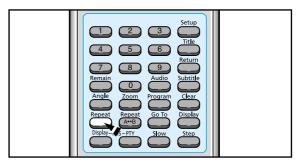


Playing Repeatedly

Press the Repeat button.

Each time the Repeat button is pressed





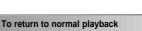
♦ Repeat playback operation is not possible with version 2.0 VCD discs if PBC is turned on.

To operate this feature, press the MENU button, and then select "PBC OFF"



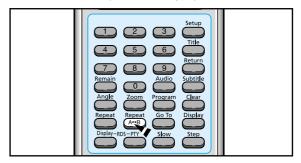
A↔B Repeat Playback

Press the Repeat A↔B button at the REPEAT : Abeginning (A) of the segment you want to review. REPEAT : A - B 2 Press the Repeat A↔B button again at the end (B) of the segment you want to review. The segment will begin repeating. REPEAT OFF



Press the Repeat A↔B button again.

♦ This function is not only available during playback of an MP3-CD

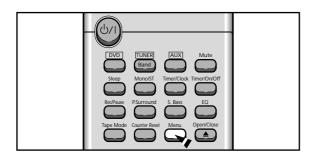


## Using Disc Menu/Title

#### To Select the Disc Menu

You can use the menus for the audio language, subtitle language, profile, etc. DVD menu contents differ from disc to disc.

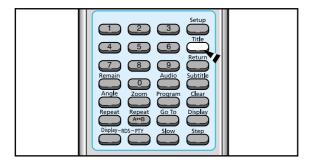
- 1 Press the Menu button during playback.
  - ◆ The Menu Screen appears.
  - ♦ When playing a VCD version 2.0, you can operate it using PBC On/Off function.
- Use the Up/Down (▲/▼) or Left/Right( ◀/▶) button to access the different features.
- 3 Press the Enter button.
  - ◆ The selected item will play.



## Using the Title Menu

Press the Title button.

- For DVDs containing multiple titles, you can view the title of each
- Depending on the disc, this function may either not work at all, or may work differently.



#### Program Playback

Use this function with video and music CDs to play the tracks in a particular order.



To Program Tracks in a particular order

Press the Program button.



- Press the Enter button then use the Number buttons to select the desired title.
  - ♦ You can use also just the Left/Right (  $\blacktriangleleft$  /  $\blacktriangleright$  /  $\blacktriangle$  /  $\blacktriangledown$  ) button.



- Press the Enter button, then use the Number buttons to select the desired chapter.
  - ♦ You can use also just the **Left/Right** ( $\blacktriangleleft/\triangleright/\blacktriangle/\blacktriangledown$ ) button.



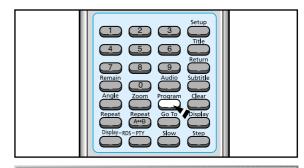
- Press the Enter button.
  - ♦ The selected track number is programming and the cursor moves to the next number.



- At this time, you can continue programming if you want to.
  - ♦ When programming more than NEXT↓ 10 tracks, select and then press the Enter button.

The program selection screen where you can program up to 10 additional tracks appears.





#### To Playback the Tracks in the Programmed Order

♦ Press the **Play/Pause** ( ▶**II** ) button.

#### To Cancel the Programming

◆ Press either the **Program** button or **Stop** ( ■ ) button.

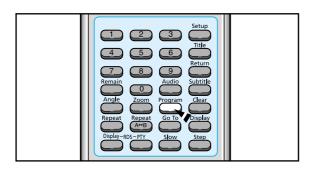
#### Program Playback (Cont'd)





#### To Change the Program

- 1 Press the Up/Down (▲/▼) button to select the track number to be changed.
- Press the **Enter** button to select the title or chapter to be changed.
  - The cursor moves to the next number when the Enter button is pressed again.
- 3 Press the Clear button and then press the Number buttons.
  - ◆ You can use also just the **Left/Right** ( ◀/ ▶ ) button.
- 4 Press the **Enter** button.
  - ♦ The cursor moves to the number below.
- 5 Repeat steps 1-4 above to change the program.



#### To delete the entire Program

- ◆ Press the **Stop** ( ) button twice during playback.
- ◆ Press the Stop ( ) button once when in the Stop mode.
- ◆ Press the Open/Close (▲) button on the main unit. The disc tray will open and then close. The program will then be deleted.

#### When you have entered a wrong number

Press the Clear button.

• When you want to delete a selection during programming, select the track (or chapter, or title) to be deleted and then press the Clear button.



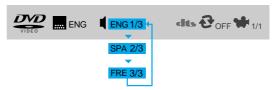
- ♦ The program function does not work with MP3 CDs.
- You can program or change particular tracks for VCD or CD discs in the same manner.

#### Selecting the Audio Language/Subtitle Language

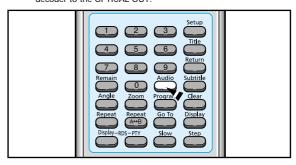


#### Press the Audio button.

Depending on the number of languages recorded on a DVD disc, a different audio language (ENGLISH, SPANISH, FRENCH etc.) is selected each time the button is pressed.



- ▶ Depending on the disc, DTS or DIGITAL PRO LOGIC can be selected.
  - To listen to DTS audio, connect an amplifier equipped with a DTS decoder to the OPTICAL OUT.

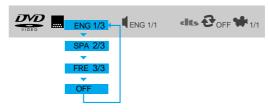




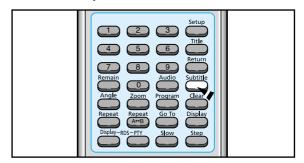
#### Selecting the Subtitle Language

#### Press the Subtitle button.

- Depending on the number of languages recorded on a DVD disc, a different subtitle language (ENGLISH, SPANISH, FRENCH etc.) is selected each time the button is pressed.
- ♦ To make the subtitles disappear, select "OFF".



- ➤ If the word INVALID appears on the TV screen while buttons are being operated, that operation is not possible with that particular disc.
  - Depending on the disc, the audio or subtitle language function may not work.



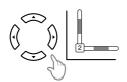
# Various DVD Functions

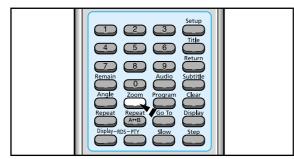


#### To enlarge an image

#### Press the Zoom button.

- ♦ Images can be enlarged 2x and 4x.
- ◆ During DVD playback, press the **Zoom** button to zoom in 2X/4X/normal, in that order.
- ◆ Press ( ◀/►/▲/▼) to move the enlarged portion you want to watch.







#### Selecting the desired Screen Angle



#### Press the Angle button.

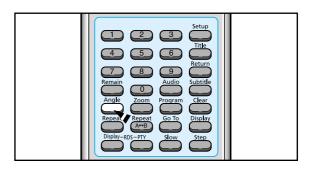
- ♦ This function only works with discs on which multiple angles have been
- During playback, press the Angle button to select the desired angle in 1/3, 2/3, 3/3, normal, in that order.











#### CD-R/RW playback compatibility

- ♦ Your DVD player can also play CD-R and CD-RW discs recorded in digital audio format. When recording your own CD-R or CD-RW discs, make sure that the recording session is properly terminated, or they will not be playable. (Depending on disc properties and recording quality, some CD-R/RW may not be playable.)
- ◆ CD-RW has a lower reflection rate than CD-R media and consequently it will take a longer to read CD-R discs.
- ◆ CD-RW discs recorded at high speed tend to be difficult for the DVD player to read. If the recording speed for the CD-RW disc is not predetermined, write it at low speed.



#### MP3 Playback

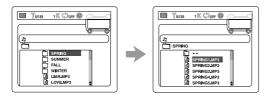


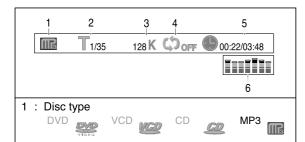


This system is incorporated with an MP3 decoder. You can play back MP3 tracks (files)recorded on CD-Rs,CD-RWs,and CD-ROMs.

## Starting Playback

- ♦ It is recommended to turn on your TV when playing back an MP3 disc.
- 1 Press the **Open/Close**(▲) button to load a disc.
- 2 Press the Play/Pause(►II) button.
  - After detecting the disc, playback starts.
  - The on-screen bar and the contents recorded on the MP3 disc will be shown on the TV if it is turned on.





- 2 : Current track (file) and total number of the tracks on the disc
  - Ex.: 1st track is playing out of 35 tracks recorded.
- 3 : Bit rate
  - Ex.: Bit rate used for recording the loaded disc is 128 Kbps. (See below)
- 4 : Repeat mode indicator
  - Ex.: When repeat mode is turned off.
- 5 : Elapsed playing time and the total playing time of the current track
- 6 : Sound indication
  - Indicates sound input level. (Only appears during playback.)

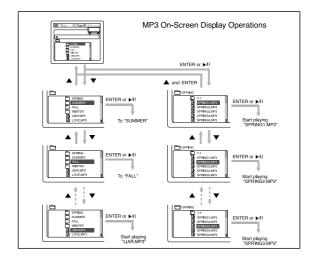
#### To stop during playback

Press the **Stop** (■) button.

#### Operations Using the On-Screen Display

- It is recommended to turn on your TV when playing back an MP3 disc.
- When the loaded MP3 disc is recognized, the following on-screen display appears on the TV screen.

(The contents of this on-screen display varies according to the disc —the way MP3 tracks were recorded on the disc.)



Button To do	
ENTER, ▶II Start playback or go into a director	
▲/▼ Select a track or directory.	

## What is MP3?

MP3 is an abbreviation of Motion Picture Experts Group (or MPEG) Audio Layer 3. MP3 is simply a file format with a data compression ratio of 1:10 (128 Kbps\*).

That means,by using MP3 format, one CD-R or CD-RW can contain 10 times as much data volume as a regular CD can. \*Bit rate is the average number of bits that one second of audio data will consume. The measuring unit used is Kbps (1000 bits per second).

To get a better audio quality, choose a higher bit rate. The most popular bit rate for encoding (recording) is 128 Kbps.

## MP3 File Compatibility

- This system can only read MP3 files that are recorded in the format that is compliant with ISO 9660 Level 1 or
- The system can read or play MP3 files only with the extension code —".mp3".
- ID3\*tags cannot be shown on the display.
   \*An MP3 file can contain file information called "ID3 Tag" where its album name, performer, rack title, etc. are recorded.

## System Setup

You can use the DVD player's Setup function to select the TV screen ratio, rating limit, or digital output mode.



#### To Set up the System

From the stop mode, press the **Setup** button.



2 Press the Left/Right ( ◀/▶) button to select the system.



3 Press the **Up/Down** (▲/▼) button to select the desired item.



- 4 Press the Enter button or Right (►) button.
  - Move to the detailed items.
  - ◆ Then press the Left ( ◀) button to return to the previous step.

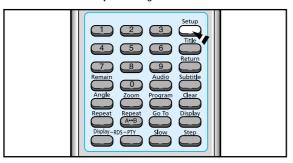


Press the Up/Down (▲/▼) button to select the desired sub-item and then press the Enter button.



#### To End the System Setup

◆ Press the Setup button again.





#### TV SCREEN(TV SCREEN RATIO)



Select when you want to watch a 16:9 screen ratio DVD movie on a TV with a 4:3 ratio screen.



- 4:3LB
- ♦ You can see the full 16:9 picture, but black bars will appear at the top and bottom of the screen.
- 4:3PS
- ♦ You can only view the central portion of the 16:9 screen.
- 16:9
- ♦ You can view in wide screen but the top and bottom of the picture will be cut off.
- ♦ However if the movie is recorded in 4:3 ratio, you cannot view the full 16:9 picture with the above functions.



#### RATING LEVEL

The Rating Level function works in conjunction with DVDs which have been assigned a rating, to help control the type of DVD that your family watches.



Select RATING LEVEL, then press the Enter button.



- Use the number(0~9) buttons to input a 4digit password.
  - ◆ The player's password is set to "7890" by default.



- Use the **Up/Down** (▲/▼) button to select either RATING LEVEL or NEW PASS-WORD, and then press the Enter button.
  - ♦ There are up to 8 rating levels on a disc.
  - ♦ If LEVEL 6 is selected, a disc which contains rating LEVEL 7 and above cannot be
  - ♦ If you select NEW PASSWORD, the screen changes and enables you to enter the new password.

#### When the rating level password has been forgotten

While the player is in the stop mode, hold the Mono/ST button down on the main unit for more than 5 seconds.

- ◆ "INITIAL" appears on the display and all default settings will return to Factory Preset.
- ♦ Press the On/Standby ( ♂/ | )button.



# System Setup (Cont'd)









**BITSTREAM** Select this if Dolby Digital 5.1 CH connections have been made.

> Sends a digital signal that carries the Dolby Digital 5.1 or DTS multichannel information to your external decorder.

#### LPCM

Select this otherwise.

♦ Sends a linear PCM(Pulse Code Modulation), or 2 channel stereo signal, to your A/V receiver.

# Setting up the Language Features

Using the DVD player's Setup function, you can customize the Menu Language, Subtitle Language, and Disc Menu Language.

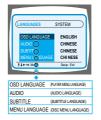


To set up the language feature

Press the **Setup** button from the stop mode.



Press the Up/Down (▲/▼) button to select the desired item.

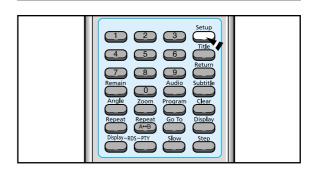


- 3 Press the **Enter** button or **Right** (▶) button.
  - Move to the language features.
  - $\blacklozenge$  Then press the Left (  $\blacktriangleleft$  ) button to return the previous step.



Press the **Up/Down** (▲/▼) button to select the desired language and then press the Enter button.





To End the Language Features Setup

Press the Setup button again.

# Searching for and Storing the Radio Stations

You can store up to:

- ♦ 15 FM stations
- ♦ 8 MW stations
- ♦ 7 LW stations
- Switch the system on by pressing **On/Standy** ( $\bigcirc$ ).
- Select the required frequency band by pressing TUNER/Band again.

Result: The appropriate indication is displayed:

 ♦ FM
 Frequency Modulation

 ♦ AM(MW)
 Medium Wave

 ▶ LW
 Long Wave

> PRESET function is explained in detail in the section "Selecting a Stored Station" on.

- 4 Select the station to be stored by:
  - ◆ Pressing or ➤ buttons to increase or decrease the frequency respectively.

  - The automatic search procedure may stop on a frequency that does not correspond to a radio station. If this happens, use the manual search mode.
- If you do not want to store the radio station found, revert to Step 4 and search for another station.

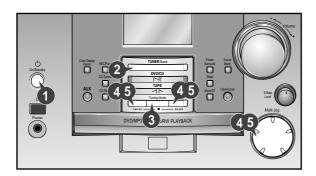
Otherwise:

- a Press **Program**.

  <u>Result:</u> **PROG** and the program number are displayed.
- b Press 

  or 

  to assign a program number between 1 and 15.
- Press Program to store the radio station.
   Result: PROG is no longer displayed and the station is stored.
- 6 To store any other radio frequencies required, repeat Steps 3 to 5.
- ◆ The PROGRAM function can be used to assign a new station to an existing program number.



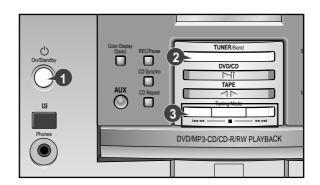
## Selecting a Stored Station

You can listen to a stored radio station as follows:



- Switch the system on by pressing On/Standby (🖒 ) .
- Select the required frequency band by pressing TUNER/Band on the front panel.
- 3 Select the radio station as follows.

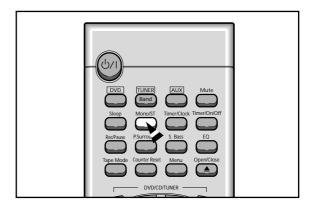
To listen to	Press
Stored station	1. the <b>Tuning Mode</b> button until
	"PRESET" is displayed.
	<ol><li>2. I◄or ▶▶ button to select the</li></ol>
	required program



#### Improving Radio Reception

You can improve the quality of radio reception by:

- ♦ Rotating the FM or AM(MW) aerial
- If reception from a specific FM radio station is poor, press Mono/ST to switch from stereo mode to mono. The quality of the sound will be improved.



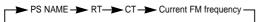
#### About RDS broadcasting





This unit has the RDS (Radio Data System) function, which enables for the various information such as broadcasting station, radio text, time and 30 types of programs (News, Rock, Classic, etc.) to be received from the FM RDS station together with normal radio signal.

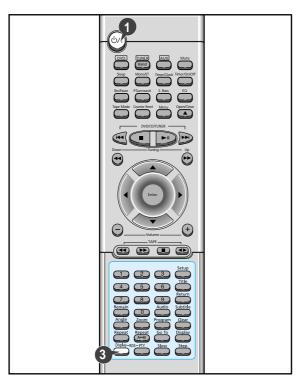
- 1 Press the On/Standby (6) button.
- Receive the FM radio.
  - See the radio receiving method on the page 23.
  - FM and frequency are shown on the display
  - If the received station transfers the RDS information, 'RDS' appears automatically on the display
- Press the RDS Display button to select the desired RDS mode.
  - Whenever the button is pressed, RDS mode changes as follows.



♦ The RDS function is available only in FM broadcasting.

#### **Description on RDS function**

- 1. PTY(Program Type): Displays the type of programme currently being broadcast
- 2. PS NAME(Program Service Name): Indicates the name of broadcasting station and is composed of 8 characters.
- 3. RT(Radio Text): Decodes the text broadcast by a station (if any) and is composed of maximum 64 characters.
- 4. CT(Clock Time): Decodes the real time clock from the FM frequency.
- Some stations may not transmit PTY, RT or CT information therefore this may not be displayed in all
- 5. TA(Traffic Announcement): When this symbol flashes it shows that the traffic announcement is in progress.



#### About RDS DISPLAY function

#### About "PS NAME" MODE



Displays the name of broadcasting station.

Press the RDS Display button to select the PS NAME.

- ◆ "PS NAME" appears on the display.
- ♦ If the PS information is being received, the PS name (BBC, AFO, NDR, etc.) is shown on the display
- If the PS information isn't received, the original FM frequency is shown.
- Even though no RDS Display button is pressed, the reception of PS information ensues the PS name is displayed.

#### **About 'RT' MODE**



Displays the character transmitted from the broadcasting station.

Press the RDS Display button to select the RT MODE.

- "RT" appears on the display.
- If the RT information is being received, the received information is shown on the display.
- ♦ If the RT information isn't received, the "NO RT" is shown. On the display.

#### About CT(Clock Time)



Sets the time of RDS clock.

To select the CT time, set the RDS Display button to CT MODE.



- ♦ The CT information will take up to 2 minutes to be decoded therefore the clock isn't displayed immediately.
- ♦ If there is no received CT information, "NO CT" is displayed.

# PTY(Program Type) indication and PTY-SEARCH function

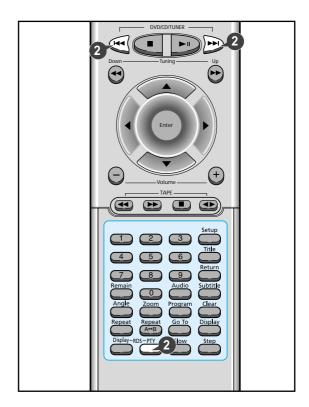
- ◆ The PTY information is composed of an identification symbol, which helps the FM radio to recognize the program type of each FM station.
- ◆ The below 30 PTY information is shown on the display by pressing the Pty button

Display	Program Type	
NEWS	News including an announced opinion and report	
AFFAIRS	Several matters including a current incident, documentary, discussion and analysis.	
INFO	Information including weights and measures, returns and fore- cast, matters interesting the customer, medical information, etc.	
SPORT	• Sports	
EDUCATE	Education	
DRAMA	Drama-Radio serial, etc.	
CULTURE	Culture-National or local culture including the religious problem, social science, language, theater,etc.	
SCIENCE	Natural science and technology	
VARIED	Others-Speech, amusing program (quiz, game), interview, comedy and satirical play, etc.	
POP M	Pop music	
ROCK M	Rock music	
M.O.R.M	M.O.R- Comfortable music, occasionally vocal or piece	
LIGHT M	Light classical music- Classical music and instrumental and chorus music	
CLASSIC	Heavy classical music-Orchestra music, symphony, chamber music and opera	
OTHER M	Other music - Jazz, R&B country music	
WEATHER	Weather	
FINANCE	• Finance	
CHILDREN	Children's programmes	
SOCIAL A	Social affairs	
RELIGION	• Religion	
PHONE IN	• Phone in	
TRAVEL	• Travel	
LEISURE	Leisure	
JAZZ	Jazz Music	
COUNTRY	Country Music	
NATIONAL M	National Music	
OLDIES	Oldies Music	
FOLK M	• Folk Music	
DOCUMENT	Documentary	
TEST	Alarm Test	

#### About PTY-SEARCH



- 1 Receive the FM radio.
  - See the radio receiving method on the page 23.
    - ♦ The FM and frequency appear on the display.
      - If the received station is transmitting the RDS information, "RDS" lights up.
- 2 Press the PTY button.
  - The PTY MODE(NEWS, AFFAIRS, etc.) appears on the display.
  - ◆ Press the TUNING ◄ or ➤ button to select the desired PTY MODF
- If the station is transmitting no PTY information, 'NO PTY' lights on the display.
  - When the PTY MODE is selected(The PTY MODE is shown on the display), press the PTY KEY once again to convert into PTY-SEARCH MODE and auto-search the station sequentially.
  - If the PTY MODE received in the course of auto-search agrees with the selected PTY MODE, the auto-search stops and the PTY-SEARCH is finished.
- If the PTY MODE which agrees with the PTY MODE selected in the course of auto-search, isn't received, it is returned to the first frequency at beginning the PTY SEARCH and the auto-search and PTY SEARCH are suspended.





## Listening to a Cassette



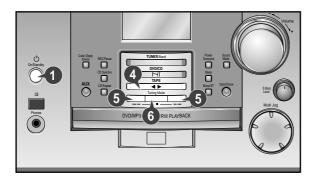
- (O) (A)
- Always treat your cassettes with care; refer, if necessary, to the section entitled "Precautions When Using Audio Cassettes" on page 32.
- 1 Switch the system on by pressing On/Standby ( 也).
- Open the cassette deck by pushing on the corner of the cover marked Push Eject (▲) until you hear a click and then releasing it.
  ♦ Insert the pre-recorded cassette with the open edge of the tape
- 3 Close the deck by pushing on it until it clicks into place.

4	To listen to	Press
	Side A ····	Tape ( ◄►) button once.
	Side BResult: The cassette starts playing.	Tape ( ◄►) button twice.

facing downwards.

То		Press	
Rewind the cassette ·····	44	button.	
Fast-forward the cassette ·····	<b>&gt;&gt;</b>	button.	

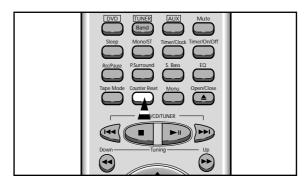
6 When you have finished playback, press ■ button.



#### Tape Counter

When playing a cassette in one of the cassette decks, a counter is displayed to enable you to take note of the counter value at the start of each track to start playback at the beginning of the track to which you wish to listen.

- Before starting to record a cassette for which you wish to take note of the counter values at the beginning of each track, reset the counter by pressing Counter Reset on the front panel.
- Each cassette deck has a separate counter.



# Selecting the Cassette Playback Mode

Your micro component system has three cassette playback modes which enable you to listen to both sides of a cassette automatically.

Press Tape Mode until the appropriate symbol is displayed.

When the display indicates...

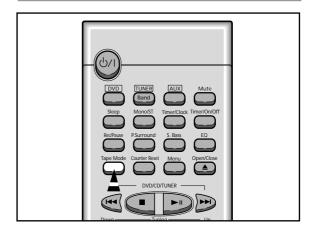
The micro component system plays back...

One side of the selected cassette and then stops.

One side of the cassette.

The other side of the cassette and then stops.

Both sides of the cassette indefinitely until you press stop.



#### Recording a Compact Disc

You can record a compact disc on a cassette in two different ways:

- Synchronised recording
- ◆ Direct recording
- If the REC button is pressed while playing back a 5.1 channel encoded DVD, no sound will be output from the center and rear

#### Synchronised recording

This feature enables you to synchronize the start of the recording with the start of the disc or track of your choice.

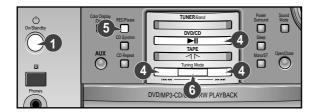
- Switch the system on by pressing On/Standby ( (b)).
- Insert a blank cassette in Deck.
- 2 Load a compact disc.
- 4 Press the DVD/CD( ►II ) button.
  - $\blacklozenge$  Use the CD selection (  $\blacktriangleright\!\!\blacktriangleleft$  ,  $\blacktriangleright\!\!\blacktriangleright\!\!\blacktriangleleft$  ) buttons to select the desired song.
- Press the CD Synchro button on the remote control.
  - When stopped, press the button to start the recording from the first piece of music.
  - Press CD Synchro button on the remote control.during the playback of CD to start the recording from the first part of the music being
- 6 To stop recording, press button.



#### Direct recording

The direct recording mode enables you to start recording with any track on the compact disc.

- ♦ You do not need to adjust the volume, as it has no effect on the recording.
- 1 Switch your system on by pressing **On/Standby** (**(b)**).
- Insert a blank cassette in Deck.
- Load a compact disc.
- Press the DVD/CD( ►II ) button.
  - ♦ Use the CD selection ( , ▶▶) buttons to select the desired song.
- Press the REC/Pause button. Result: Recording will begin.
- To stop recording, press button.



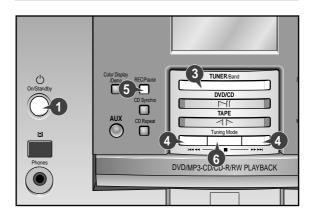
## Recording a Radio Program



Ø Ø

You can record a radio program of your choice.

- ♦ You do not need to adjust the volume, as it has no effect on
- 1 Switch the system on by pressing **On/Standby** (**(b)**).
- 2 Insert a blank cassette in Deck.
- Select the TUNER function by pressing TUNER/Band.
- Select the radio station that you wish to record by pressing or ▶ button .
- Press REC/Pause. Result: REC is displayed in red and recording starts.
- 6 To stop recording, press button.



#### Timer Function



The timer enables you to switch the system on or off at specific times.

Example: You wish to wake up to music every morning.

- If you no longer want the system to be switched on or off automatically, you must cancel the timer.
- Before setting the timer, check that the current time is correct.
  - For each step, you have a few seconds to set the required options. If you exceed this time, you must start again.
- 1 Switch the system on by pressing **On/Standby ( 也 )** .
- Press Timer/Clock until TIMER is displayed.
- 3 Press Enter.

Result: ON TIME is displayed (instead of the equalizer symbols) for a few seconds, followed by any switch-on time already set; you can set the timer switch-on time.

- 4 Set the timer switch-on time.
  - a Set the hour by pressing ◀ or ▶ button.
  - b Press Enter.

Result: The minutes flash.

- Set the minutes by pressing ◀ or ▶ button.
- d Press Enter.

Result: OFF TIME is displayed (instead of the equalizer symbols) for a few seconds, followed by any switch-off time already set; you can now set the timer switch-off time.

- 5 Set the timer switch-off time.
  - a Set the hour by pressing  $\blacktriangleleft$  or  $\blacktriangleright$  button.
  - b Press Enter.

Result: The minutes flash.

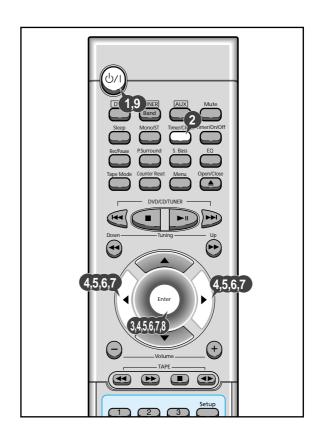
- c Set the minutes by pressing ◀ or ▶ button.
- d Press Enter.

Result: VOL 10 is displayed, where 10 corresponds to the volume already set.

- 6 Press ◀ or ▶ button to adjust the volume level and press Enter.
  Result: The source to be selected is displayed.
- 7 Press ◆ or ► button to select the source to be played when the system switches on.

If you select	You must also
TAPE (cassette)	Insert a cassette tape.
TUNER (radio)	<ul> <li>a Press Enter.</li> <li>b Select a preset station by pressing</li> <li>Tuning ◀ or ▶ .</li> </ul>
CD (compact disc) Load a compact disc.	

- 8 Press Enter to confirm the timer.
- Press On/Stanby () to set the system to standby mode.
  Result: () is displayed to the bottom right of the time, indicating that the timer has been set. The system will switch on and off automatically at the required times.
- If the timer switch on and off times are identical, the word ERROR is displayed.

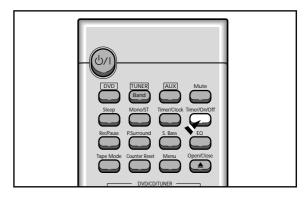


## Canceling the Timer

After having set the timer, it will start automatically as shown by the TIMER indication on the display. If you no longer wish to use the timer, you must cancel it.

You can stop the timer at any time (system on or in standby mode).

То	Press Timer On/Off
Cancel the timer ·····	Once.  Result: ( is no longer displayed.
Restart the timer ·····	Twice.  Result:  is displayed again.



#### Mute Function

You can turn the sound off temporarily on your system. <u>Example</u>: You wish to answer a telephone call.

- 1 Press Mute.
- 2 To switch the sound back on (at the same volume as before), press Mute again or the Volume buttons.

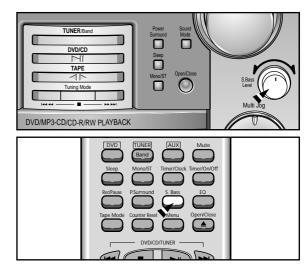


#### S. Bass Function

S.Bass function emphasizes the bass sound to produce the effect of explosion or booms.

Turn the S.Bass Level knob.

- ◆ Turn the knob clockwise or counterclockwise to switch between OFF ↔ S.BASS 1 ↔ S.BASS 2 ↔ S.BASS 3.
- ♦ Select the desired level for the bass.
- To operate from the remote control unit, press S.Bass button to select the desired mode.



## Selecting an Equalizer Preset

Your micro component system is equipped with a preset equalizer that allows you to choose the most appropriate balance between treble and bass frequencies, according to the type of music you are listening to.

The function of Power Sound amplifies bass and improves high key or bass twice as much for you to apprecitate powerful real sound.

Press Sound Mode on the front panel until the required option is selected.

Press the button repeatedly to select "PASS→ POP → ROCK → CLASSIC ".



#### Power Surround

This machine is equipped with the function of Power Sound which amplifies bass treble output to twice as much for powerful real sound.

- 1 Press the Power Surround button.
  - ◆ Press the button repeatedly to select "P. SURR → OFF".
- 2 To cancel this function, perss **Power Surround** button again.



When playing a 5.1 channel encoded DVD, the EQ, S.Bass, and Power Surround functions cannot be selected because the original sound is reproduced. (GB)

# Setting the System to Switch off Automatically



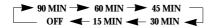
While listening to a compact disc or a cassette, you can set the system to switch off automatically <a href="Example"><u>Example</u></a>: You wish to go to sleep to music.

1 Press Sleep.

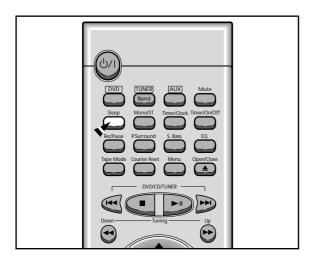
Result: The following indications are displayed:

#### 90 MIN

Press Sleep one or more times to indicate how long the system should continue playing before it switches off:



- At any time, you can:
  - ◆ Check the remaining time by pressing Sleep
  - ♦ Change the remaining time by repeating Steps 1 and 2
- 3 To cancel SLEEP function, press Sleep one or more times until OFF is display.

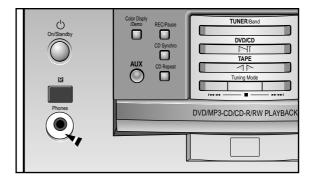


# Connecting Headphones

You can connect a set of headphones to your micro component system so that you can listen to music or radio programmers without disturbing other people in the room. The earphones must have a 3.5ø jack or an appropriate adapter.

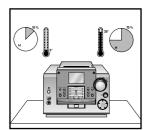
Connect the headphones to the **Phones** jack on the front panel. Result: The loudspeakers are no longer used to output the sound.

Prolonged use of headphones at a high volume may damage your hearing.



# Safety Precautions

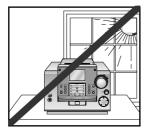
The following diagrams illustrate the precautions to be taken when using or moving your micro component system.



Ambient operating conditions:

Ambient temperature 5°C-35°C

Humidity 10-75%



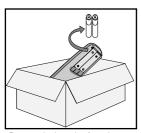
Do not expose the unit to direct sun radiation or other heat sources. This could lead to overheating and malfunction of the unit.



Do not place potted plants or vases on top of the unit. Moisture entering the unit could lead to dangerous electric shock and can cause equipment damage. In such events immediately disconnect the main plug from the socket.



During thunderstorms, disconnect the main plug from the socket. Main voltage peaks due to lightning could damage the unit.



Remove the batteries from the remote control, if not used for any extended period.

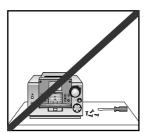
Leaking batteries can cause serious damage to the remote control.



When using headphones, take care not to listen at excessive volumes. Extended use of headphones at high volumes will lead to hearing damage.



Do not place heavy items on the main lead. Main cable damage can lead to damage of the equipment (fire hazard) and can cause electric shock.



Do not remove any equipment panels The inside of the unit contains live components, which cause electric shock.

#### Cleaning Your Micro Component System

To obtain the best possible results from your micro component system, you must clean the following elements regularly:

- ♦ The outer casing
- ◆ The compact disc player
- ♦ The cassette players (heads, rollers and drive capstans)
- Always unplug the system from the wall outlet:
  - Before cleaning it
  - ♦ If you are not going to be using it for a long time

#### **Outer Casing**

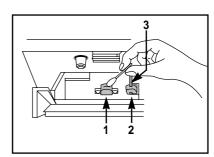
Clean the outer casing regularly using a soft cloth and a light detergent. Do not use abrasive powders, liquids or aerosol cleaners. Never let any liquids get into the system.

#### Compact Disc Player

- Before playing a compact disc, clean it with a special CD cleaning agent. Do not use the same cleaning agents as for vinyl LP records. Carefully wipe the disc from the centre outward.
- 2 Regularly clean the player with a special cleaning disc (available from your local dealer).

#### Tape Decks

- 1 Press Push Eject( ♠ ) to open the cassette deck.
- 2 Use a cotton bud and a special cassette cleaning agent to clean the:
  - ♦ Head (1)
  - Rollers (2)
  - Drive capstans (3)



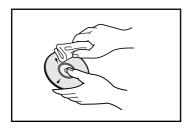
- If you will not be using the remote control for a long time, remove the batteries to prevent corrosion.
  - Although your system is very hard-wearing, it should not be used in an excessively dusty environment or subjected to shocks or extreme heat (close to heating appliances or in direct sunlight, etc.).
  - If the unit emits an unpleasant odor when in use, unplug it from the main supply and contact the after-sales service.



# Precautions When Using Compact Discs



- Handle your compact discs with care. Always hold them by the edges to avoid leaving fingerprints on the shiny surface.
- When you have finished playing a compact disc, always put it back in its case.
- Do not fix paper or adhesive tape to the discs and do not write on the label.
- ♦ Clean them with a special-purpose cloth.
- Store your compact discs in a clean place, out of direct sunlight, where they will not be exposed to high temperatures.
- ♦ Always use compact discs marked disc



# Precautions When Using Audio Cassettes

- ♦ Check that the tape in the cassette is sufficiently taut.
- To prevent erasing a cassette that you wish to keep, remove the safety tab on the upper edge of the cassette. To record a cassette, where the tab has been broken, simply cover the opening with adhesive tape.
- When you have finished playing a cassette, always put it back in its case
- Store your cassettes in a clean place, out of direct sunlight, where they will not be exposed to high temperatures.
- Avoid using 120-minute cassettes as they place unnecessary strain on the tape mechanism.







# Before Contacting the After-Sales Service

It always takes a little time to become familiar with a new appliance. If you have any of the problems listed below, try the solutions given. They may save you the time and inconvenience of an unnecessary service call.

	Problem	Checks/Explanation
G E N E R A L	The system does not work	The main lead is not correctly plugged into a wall socket or the wall socket is not switched on. The remote control batteries need replacing or the polarity has not been respected. The On/Standby button has not been pressed.
	There is no sound	The volume has been completely turned down. The correct function (TUNER, CD, TAPE, AUX) has not been selected. Vou have connected a set of earphones. The loudspeaker wires have been disconnected.
	The Timer does not work	The timer has been stopped by pressing Timer On/Off.
	In case it does not work, even the action is taken as above.	Press the <b>Sound Mode</b> button for 5 seconds in power 'OFF'(standby), then it is returned the original position (RESET)
C D / D V D	The compact disc player does not start playing	The CD function has not been selected.  The disc has been inserted face down or is either dirty or scratched.  The laser sensor is dirty or dusty.  The system has not been installed on a flat, horizontal surface.  Condensation has formed in the player; leave the system in a warm, airy room for at least one hour.
	When playing a DTS, DVD disc, no sound is produced.	Since this product incorporates technology, no sound will be output directly from the main unit. To listen to DTS sound, connect an amplifier equipped with a DTS decoder to the digital output (OPTICAL OUT).
CASSETTES	The tape does not start playing	The TAPE function has not been selected. The cassette has not been inserted correctly. The cassette player has not been closed. The tape is either slack or broken.
	The volume falls off The cassette is not erased correctly There is excessive wow and flutter	The audio heads are dirty. The rollers or drive capstans are dirty. The tape is worn.
R A D I	Reception is poor or no radio stations are received at all	The TUNER function has not been selected. The radio frequency has not been correctly selected. The aerial has been disconnected or is not facing the right way. Turn it until you find the best orientation. You are in a building that blocks radio waves; you must use an outside aerial.

If the above guidelines do not allow you to solve the problem, take a note of:

- The model and serial numbers, normally printed on the rear of the system
- ♦ Your warranty details
- A clear description of the problem

Then contact your local dealer or SAMSUNG after-sales service.

# Technical Specifications



SAMSUNG strives to improve its products at all times. Both the design specifications and these user instructions are thus subject to change without notice.

RADIO	
LW	
Usable sensitivity	60 dB
AM (MW)	
Signal/noise ratio	40 dB
Usable sensitivity	54 dB
Total harmonic distortion	2 %
FM	
Signal/noise ratio	62 dB
Usable sensitivity	3 dB
Total harmonic distortion	1.0 %
COMPACT DISC PLAYER	
Frequency range	20 Hz - 20 KHz (± 1 dB)
Signal/noise ratio	80 dB (at 1 KHz) with filter
Distortion	0.05 % (at 1 KHz)
Channel separation	70 dB
Disc sizes	Diameter: 120 or 80 mm. Thickness: 1.2 mm
•••••	
TAPE DECK	
Frequency range	125 Hz ~ 10 KHz
Signal/noise ratio	40 dB
Channel separation	35 dB
Erasing effect	60 dB
AMPLIFIER	
Output power	
	2 X 12 Watts RMS (total harmonic distortion : 10%)
	12 Watts RMS (total harmonic distortion : 10%)
	2 X 12 Watts RMS (total harmonic distortion : 10%)2 X 28 Watts RMS (total harmonic distortion : 10%)
Channel separation	45 dB
Signal/noise ratio	72 dB
GENERAL	
Dimensions	240(W) x 177 (H) x 322(D) mm



# Note on Terminology

ANGLE	Recorded onto some DVD discs are scenes which have been simultaneously shot from a number of different angles (the same scene is shot from the front, from the left, from the right, etc.). With such discs, the Angle button can be used to change the angle of view for specific scenes.
CHAPTER NUMBER	These numbers are recorded on DVD discs. A Title is subdivided into many sections, each of which is numbered, and specific parts of the video can be searched quickly using these numbers.
DVD	A high-density optical disc on which high-quality pictures and sound have been recorded by means of digital signals. Incorporating a new video compression technology (MPEG-2) and high-density recording technology, a DVD disc comprises two 0.6 mm thick discs bonded together.
PCM	An acronym for Pulse Code Modulation - another name for digital audio.
PBC (PLAYBACK CONTROL)	This is recorded on a video CD (version 2.0). Selected scenes or information can be chosen from the menu displayed on the TV monitor.
REGION NUMBER	Both the DVD player and DVD discs are encoded with a region number. If the region number on the DVD disc does not correspond to the region number of the DVD player, the player cannot play the disc.
SUBTITLES	Translated appearing at the bottom of the screen. A DVD disc can contain up to 32 subtitle languages.
TITLE NUMBER	These numbers are recorded on DVD discs. When a disc contains two or more movies, these movies are numbered as Title 1, Title 2, etc.
TRACK NUMBER	These numbers are assigned to the tracks which are recorded on video and audio CDs. They enable specific tracks to be located quickly.
VIDEO CD	Contains recordings of pictures and sound whose quality is roughly comparable to that of video tape.  This player also supports video CDs with playback control (version 2.0).
DIGITAL	You can enjoy 5.1 (or 6) channels of high fidelity digital sound from various digital input sources such as laser discs, DVD, CD etc.  DTS provides a realistic, clear surround sound that has not previously been available from conventional surround sound.
DIGITAL	5.1 (or 6) Channel Digital Surround sound reproduced from DVDs and LDs recorded as a digital signals (with property disc marking). With better sound quality, dynamic range, and directionality than the traditional Dolby surround technology, you can enjoy the dynamic realistic sound.
PRO LOGIC	A 4 channel analog sound reproduced from a program source such as a video-tape or LD with the Discipred Logic mark. You can enjoy a more realistic, robust sound unavailable from regular stereo sources.

#### THIS APPLIANCE IS MANUFACTURED BY:

